

REMARKS

Claims 1-2, 4-11 and 13-26 are pending. Claims 1, 11 and 20 are amended. No new matter is added as a result of the claim amendments.

103 Rejections

Claims 1-2, 4-6, 9, 11, 13-15 and 18

The instant Office Actions states that Claims 1-2, 4-6, 9, 11, 13-15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kroon et al. ("Kroon;" U.S. Patent No. 6,366,888) in view of Ehrman et al. ("Ehrman;" U.S. Patent Application Publication No. 2002/0040479).

The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 1-2, 4-6, 9, 11, 13-15 and 18 is not anticipated nor rendered obvious by Kroon and Ehrman, alone or in combination.

With regard to independent Claims 1 and 11, for reasons presented below, Applicants respectfully submit that neither Kroon nor Ehrman nor the combination thereof show or suggest either "encoding an item of content comprising media data to be streamed to said client into a first multiple description bitstream and into a second multiple description bitstream, ... wherein said client decodes said item of content at a first quality should only said first multiple description bitstream be received at said client, wherein said client decodes said item of content at a second quality should only said second multiple description bitstream be received at said client, and wherein said client decodes said item of content at a quality greater than either of said first or second quality should both said first and said second multiple description bitstreams be received at said client" or "encoding an item comprising media data to be streamed to said client into a first complementary multiple

description bitstream and into a second complementary multiple description bitstream, ... wherein said first multiple description bitstream is designed so that said item at a first quality is decoded by said client with only said first multiple description bitstream received at said client, wherein said second multiple description bitstream is designed so that said item at a second quality is decoded by said client with only said second multiple description bitstream received at said client, and wherein said item at a quality greater than said first or second quality is decoded by said client with both said first and said second multiple description bitstreams received at said client.”

As understood by Applicants, Kroon describes a C-representation that provides a first (minimum) quality and E-representations that contain enhancement information. Importantly, according to Kroon, the E-representations appear to require the C-representation. This is in direct contrast to the present claimed invention, in which the first and second multiple description bitstreams are decodable independent of one another, and in which either the first or second multiple description bitstreams by itself provides a usable decoded item of content.

Furthermore, as stated on page 10, lines 4-18, of the instant application with regard to the present claimed invention: “There is a critical difference between the present multiple description based approach for streaming media delivery and prior approaches, such as scalable or layered coding approaches for streaming media delivery. Namely, in scalable or layered coding the video is also coded into multiple bitstreams, however one bitstream, referred to as the baselayer bitstream, is critically important and must be correctly received in order to produce a usable decoded media stream. Specifically, in the conventional scalable or layered approaches for streaming media delivery, even if all the bitstreams except the baselayer bitstream are correctly received,

they are essentially useless unless the baselayer bitstream is correctly received creating a single point of failure. The present multiple description based streaming media delivery does not have this problem since as long as any multiple description bitstream is received it can be decoded to produce usable quality video, and as more multiple description bitstreams are received the quality of the decoded video increases.”

Applicants respectfully submit that Kroon is simply an example of the prior approaches described in the paragraph above.

Applicants respectfully submit that Ehrman does not overcome the shortcomings of Kroon. More specifically, Applicants respectfully submit that Ehrman, alone or in combination with Kroon, does not show or suggest the limitations of independent Claims 1 and 11 cited above. Foremost, Applicants respectfully submit that Ehrman, alone or in combination with Kroon, does not show or suggest multiple description bitstreams having the characteristics recited in Claims 1 and 11.

In summary, Applicants respectfully submit that independent Claims 1 and 11 are considered patentable over Kroon and Ehrman. Because Claims 2, 4-6, 9, 13-15 and 18 depend from either Claim 1 or 11 and contain additional limitations, these claims are also considered patentable over Kroon and Ehrman.

Therefore, Applicants respectfully submit that the basis for rejecting Claims 1-2, 4-6, 9, 11, 13-15 and 18 under 35 U.S.C. § 103(a) is traversed.

Claims 7-8, 10, 16-17 and 19

The instant Office Actions states that Claims 7-8, 10, 16-17 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kroon and Ehrman in view of Gershman et al. ("Gershman;" U.S. Patent No. 6,401,085).

The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 7-8, 10, 16-17 and 19 is not anticipated nor rendered obvious by Kroon, Ehrman and Gershman, alone or in combination.

Claims 7-8, 10, 16-17 and 19 are dependent on either independent Claim 1 or 11. Hence, by demonstrating that Kroon, Ehrman and Gershman do not show or suggest the limitations of Claims 1 and 11, it is also demonstrated that Kroon, Ehrman and Gershman do not show or suggest the limitations of Claims 7-8, 10, 16-17 and 19.

As presented above, Applicants respectfully submit that that Kroon and Ehrman, alone or in combination, do not show or suggest the limitations of Claims 1 and 11 cited above.

Applicants respectfully submit that Gershman does not overcome the shortcomings of Kroon and Ehrman. More specifically, Applicants respectfully submit that Gershman, alone or in combination with Kroon and Ehrman, does not show or suggest the limitations of independent Claims 1 and 11 cited above. That is, Applicants respectfully submit that Gershman, alone or in combination with Kroon and Ehrman, does not show or suggest multiple description bitstreams having the characteristics recited in Claims 1 and 11.

In summary, Applicants respectfully submit that independent Claims 1 and 11, and that Claims 1 and 11 are considered patentable over Kroon, Ehrman and Gershman. Because Claims 7-8, 10, 16-17 and 19 depend from Claim 1 or 11 and contain additional limitations, these claims are also considered patentable over Kroon, Ehrman and Gershman.

Therefore, Applicants respectfully submit that the basis for rejecting Claims 7-8, 10, 16-17 and 19 under 35 U.S.C. § 103(a) is traversed.

Claims 20-22

The instant Office Actions states that Claims 20-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kroon and Ehrman in view of Krueger et al. ("Krueger," U.S. Patent No. 6,308,222).

The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 20-22 is not anticipated nor rendered obvious by Kroon, Ehrman and Krueger, alone or in combination.

By rationale similar to that presented above, Applicants respectfully submit that that neither Kroon nor Ehrman nor the combination thereof show or suggest "wherein said client decodes an item of content at a first quality should only said first multiple description bitstream be received at said client, wherein said client decodes said item of content at a second quality should only said second multiple description bitstream be received at said client, and wherein said client decodes said item of content at a quality greater than either of said first or second quality should both said first and said second multiple description bitstreams be received at said client" as recited in independent Claim 20.

Applicants respectfully submit that Krueger does not overcome the shortcomings of Kroon and Ehrman. More specifically, Applicants respectfully submit that Krueger, alone or in combination with Kroon and Ehrman, does not show or suggest the limitations of independent Claim 20 cited above. That is, Applicants respectfully submit that Krueger, alone or in combination with Kroon and Ehrman, does not show or suggest multiple description bitstreams having the characteristics recited in Claim 20.

In summary, Applicants respectfully submit that Claim 20 is considered patentable over Kroon, Ehrman and Krueger. Because Claims 21-22 depend from Claim 20 and contain additional limitations, these claims are also considered patentable over Kroon, Ehrman and Krueger.

Therefore, Applicants respectfully submit that the basis for rejecting Claims 20-22 under 35 U.S.C. § 103(a) is traversed.

Claims 23-26

The instant Office Actions states that Claims 23-26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kroon, Ehrman and Krueger in view of Gershman.

The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 23-26 is not anticipated nor rendered obvious by Kroon, Ehrman, Krueger and Gershman, alone or in combination.

Claims 23-26 are dependent on independent Claim 20. Hence, by demonstrating that Kroon, Ehrman, Krueger and Gershman do not show or

suggest the limitations of Claim 20, it is also demonstrated that Kroon, Ehrman, Krueger and Gershman do not show or suggest the limitations of Claims 23-26.

As presented above, Applicants respectfully submit that that Kroon, Ehrman and Krueger, alone or in combination, do not show or suggest the limitations of Claim 20 cited above.

Applicants respectfully submit that Gershman does not overcome the shortcomings of Kroon, Ehrman and Krueger. More specifically, Applicants respectfully submit that Gershman, alone or in combination with Kroon, Ehrman and Krueger, does not show or suggest the limitations of independent Claim 20 cited above. That is, Applicants respectfully submit that Gershman, alone or in combination with Kroon, Ehrman and Krueger, does not show or suggest multiple description bitstreams having the characteristics recited in Claim 20.

In addition, Applicants respectfully submit that the fact that such a large number of references is cited against Claims 23-26 provides further evidence of the non-obviousness of the present claimed invention.

In summary, Applicants respectfully submit that Claim 20 is considered patentable over Kroon, Ehrman, Krueger and Gershman. Because Claims 23-26 depend from Claim 20 and contain additional limitations, these claims are also considered patentable over Kroon, Ehrman, Krueger and Gershman.

Therefore, Applicants respectfully submit that the basis for rejecting Claims 23-26 under 35 U.S.C. § 103(a) is traversed.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.


Based on the arguments presented above, Applicants respectfully assert that Claims 1-2, 4-11 and 13-26 overcome the rejections of record and, therefore, Applicants respectfully solicit allowance of these claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

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Respectfully submitted,

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